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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte RONALD A. VACCARO

Appeal 2019-003491 Application 15/278,339 Technology Center 3600

Before JAMES A. WORTH, BRADLEY B. BAYAT, and TARA L. HUTCHINGS, *Administrative Patent Judges*.

BAYAT, Administrative Patent Judge.

DECISION ON APPEAL

STATEMENT OF THE CASE

Ronald A. Vaccaro (Appellant)¹ appeals under 35 U.S.C. § 134(a) from the decision rejecting claims 17–19 and 22–28, which are all the claims pending in the application. We have jurisdiction under 35 U.S.C. § 6(b). We REVERSE.

¹ "Appellant" refers to "applicant" as defined in 37 C.F.R. § 1.42. Appellant identifies the real party in interest as "CommScope Technologies LLC." Appeal Br. 2.

CLAIMED SUBJECT MATTER

Appellant's "invention relates generally to devices for supporting cables and, in particular, to hangers for securing cables to support structures." Spec. ¶2. Independent claim 17, reproduced below, is illustrative of the subject matter on appeal.

17. A cable hanger, comprising:

a first half including a main body with a first cable recess, a latch adapted for mounting to a mounting structure, and a first securing feature;

a second half including a main body with a second cable recess, a bore adapted for receiving a latch of a second cable hanger, and a second securing feature;

wherein the first half is mated with the second half such that the first and second cable recesses form a pocket for receiving and grasping a cable, and wherein the first and second securing features engage to maintain the first half and the second half in a mated condition; and

wherein the first half and the second half are connected via a hinge; and

wherein the main body of the first half includes a bore that is coaxial with the latch; and

wherein the cable hanger further comprises a plunger, the plunger configured to reside in the bore of the first half and maintain the latch in a latched condition; and

wherein the plunger is attached to the first half within the bore of the first half and configured to break away from the bore of the first half to be moved to maintain the latch in the latched condition.

REJECTIONS

I. Claims 17, 19, 23–25, 27, and 28 are rejected under 35 U.S.C. § 103 as being unpatentable over Allmann et al. (US 2007/0246614 A1, pub.

- Oct. 25, 2007) ("Allmann"), Meyer (US 6,074,144, iss. June 13, 2000), and Korczak et al. (US 2005/0109890 A1, pub. May 26, 2005) ("Korczak"). ²
- II. Claim 18 is rejected under 35 U.S.C. § 103 as being unpatentable over Allmann, Meyer, Korczak, and Meyers et al. (US 2013/0240684 A1, pub. Sept. 19, 2013) ("Meyers").
- III. Claim 22 is rejected under 35 U.S.C. § 103 as being unpatentable over Allmann, Meyer, Korczak, and Kovac (US 2007/0018057 A1, pub. Jan. 25, 2007).
- IV. Claim 26 is rejected under 35 U.S.C. § 103 as being unpatentable over Allmann, Meyer, Korczak, and Nelson (US 5,393,021, iss. Feb. 28, 1995).

OPINION

Rejection I

Claims 17, 19, 23–25, 27, and 28

In rejecting independent claim 17 as unpatentable over Allmann, Meyer, and Korczak, the Examiner finds Allmann discloses a first and second half including a main body with a first and second cable recess, a first and second securing feature, "wherein the first half is mated with the second half such that the first and second cable recesses form a pocket for receiving and grasping a cable," "wherein the first and second securing features engage to maintain the first and second half in mated condition;" "and wherein the first half and the second half are connected via a hinge;" and "wherein the main body of the first half includes a bore that is coaxial

² The statement of the rejection appears to inadvertently include claim 26. *See* Final Act. 2–4.

with the latch." Final Act. 2–3. The Examiner finds that Allman does not disclose

a latch adapted for mounting to a mounting structure; the bore in the second half adapted for receiving a latch of a second cable hanger; and wherein the cable hanger further comprises a plunger, the plunger configured to reside in the bore of the first half and maintain the latch in a latched condition; and wherein the plunger is attached to the first half within the bore of the first half and configured to break away from the bore of the first half to be moved to maintain the latch in the latched condition

Id. at 4–5. To partially cure this deficiency, the Examiner finds Meyer discloses a fastener used with a cable support which includes a latch for mounting to a mounting structure, the cable hanger comprising a hollow plunger configured to reside in a bore of the first half, and maintain the latch in a latched condition, and wherein the plunger is attached to the first half within the bore of the first half and configured to break away from the bore of the first half. *Id.* at 5–6. The Examiner determines that it would have been obvious to an artisan "to replace the bolt of Allmann with the fastener of Meyer since Meyer states that threaded fasteners require expensive and hazardous installation tools (Col. 1, Lines 24–26) whereas the Meyer fastener provides a fastener with a low pin insertion force, eliminates any threaded components and provides a fastener which has low manufacturing costs (Col. 1, Lines 31–47)." Id. at 6 (emphasis omitted). The Examiner finds "[t]he combination of Allmann in view of Meyer does not disclose that the bore of the second half is adapted for receiving a latch of a second cable hanger" (id.), and, instead, relies on Korczak to further modify the Allmann/Meyer device. The Examiner determines:

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It would have been obvious to one of ordinary skill in the art before the effective filing date of the claimed invention to modify the bore in the second half of Allman to be adapted for receiving a latch of a second cable hanger as disclosed by Korczak since Korczak states that such a modification enables the devices to be combined or stacked without disassembling prior hangers (Paragraph 0066, Lines 3–5).

Id. at 7.

Alleging error in the rejection, Appellant argues that the Examiner's proposed modification would result in a device that would not function as intended, because

the insert 3 of Allmann would prohibit the double tapered nose 20 of the fastener 10 of Meyer from functioning as intended. The double tapered nose 20 is formed from two downwardly extending arms 22, 24 which splay outwardly slightly so that the outer surfaces at the lower ends thereof are separated by a distance greater than the diameter of the opening to be engaged by the fastener 10. Meyer, at col. 3, ln. 1–15. If the fastener of Meyer were inserted into the holding device of Allmann, the insert 3 of Allmann would prevent the downwardly extending arms 22, 24 of the fastener from splaying outwardly.

Appeal Br. 7.

Responding to Appellant's argument, the Examiner states that "the Examiner's proposed combination would simply attach the portion (20) of Meyer to the bottom of surface (21) of Allman in the same manner that Meyer discloses that (20) is attached to the bottom of the cable hanger as illustrated in Fig. 10. Therefore, it is the Examiner's position that since the insert (3) is attached to the top surface of (21) in Allman, the insert (3) would have no impact on the splaying outward of the arms (22 and 24)." Ans. 11. Appellant's position is more persuasive.

Allmann is directed to a holding device 1 for at least one pipe for inserting an insert 3, which comprises abutment ribs 34 "made integral with the insert 3" (Allman ¶ 27), into the basic body 21 of the housing 2 and is aligned on the basis of a cylindrical pin 23, with a bolt inserted into the through hole of the cylindrical projection 23, the basic body 21, the lid 22, and insert 3. *Id.* ¶¶ 35–38. The Examiner's proposed modification is "to replace the bolt of Allman with the fastener of Meyer." Final Act. 6.

Meyer's fastener 10 includes a double tapered nose 20, which is "formed from two downwardly extending arms 22, 24 with slot 26 formed therebetween through which locking pin 14 traverses between the predriven and driven states." *Id.* 3:1–4. "Downwardly extending arms 22, 24 splay outwardly slightly so that the outer surface at the lower ends thereof are separated by a distance greater than the diameter of the opening to be engaged by fastener 10." *Id.* 8–11.

The evidence of record weighs in favor of Appellant's position because "the rib-like abutment projections 34 are part of the insert 3 of Allman and pass through the housing bottom of the basic body 21." Appeal Br. 9. Even if we accept the Examiner's position of "simply attach[ing] the portion (20) of Meyer to the bottom of surface (21) of Allman," we are not convinced that when "the insert (3) is attached to the top surface of (21) in Allman, the insert (3) would have *no impact* on the splaying outward of the arms (22 and 24)." Ans. 11 (emphasis added). Although insert 3 is captured in the top surface of the basic body 21, Allman discloses that "[i]n the inserted state of the insert 3, the rib-like abutment projections 34 pass through the housing bottom of the basic body 21 and project at the abutment side of the housing 2 out of the housing 2." Allman ¶ 35; see also Allman

Fig. 3 (showing the holding device with the insert being inserted into the housing with abutment projections passing through bottom of the body 21).

The Examiner's reliance on Figure 1 of Allman as "illustrat[ing] that the projections are spaced apart away from the central portion or where the bolt passes through and therefore would not interfere with the arms (22 and 24 of Meyer) from spreading outward" (Ans. 12) appears to be based on speculation. See Appeal Br. 7. Figure 1 of Allman shows the abutment ribs 34 extending over the width of the insert 3, with the abutment ribs 34 extending from and adjacent to the central portion where the Examiner proposes the double tapered nose 20 of Meyer would be attached. And, as discussed, the arms of the double tapered nose of Meyer extend and splay outwardly "so that the outer surface at the lower ends thereof are separated by a distance greater than the diameter of the opening to be engaged by fastener 10." Meyer 3:9–11 (emphasis added). In other words, we are persuaded that if the fastener of Meyer is inserted into the holding device of Allman, as the Examiner proposes, the abutment ribs 34 adjacent to the central portion of the insert 3 of Allman would interfere with Meyer's downwardly extending arms 22, 24 from splaying outwards, and, therefore, the proposed modified device would not function as intended.

In sum, the Examiner has not established an evidentiary basis on this record to support a conclusion that it would have been obvious to modify Allman with Meyer and Korczak to arrive at the claimed invention. Accordingly, we do not sustain the Examiner's rejection of independent claim 17 under 35 U.S.C. § 103(a), and claims 19 and 23–25 which depend from claim 17. We also do not sustain the rejection of independent claims 27 and 28 for the same reasons, because the Examiner relies on the same

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proposed modification to Allman with Meyer's fastener in rejecting those claims. *See* Final Act. 3–7.

Rejections II, III, and IV

Claims 18, 22, and 26

Rejections of dependent claims 18, 22, and 26 rely on the same proposed modification of Allman and Meyer discussed above, which the additional references fail to remedy. As such, we do not sustain the rejections of claims 18, 22, and 26 for the same reasons as claim 17.

CONCLUSION

The decision to reject claims 17–19 and 22–28 under 35 U.S.C. § 103 is reversed.

Decision Summary:

| Claims | 35 U.S.C. | Basis | Affirmed | Reversed |
|--------------------|-----------|-----------------|------------|-------------|
| Rejected | § | | | |
| 17, 19, 23– | 103 | Allmann, Meyer, | | 17, 19, 23– |
| 25, 27, 28 | | Korczak | | 25, 27, 28 |
| 18 | 103 | Allmann, Meyer, | | 18 |
| | | Korczak, Meyers | | |
| 22 | 103 | Allmann, Meyer, | | 22 |
| | | Korczak, Kovac | | |
| 26 | 103 | Allmann, Meyer, | | 26 |
| | | Korczak, Nelson | | |
| Overall Out | come | | 17–19, 22– | |
| | | | | 28 |

REVERSED